

SYSTEM **P**LANNING & **A**NALYSIS **R**eport

S-33

T.H. 51

T.H. 94 TO PIERCE BUTLER ROUTE

S.P. 6215

DECEMBER, 1970

PREPARED BY
OFFICE OF SYSTEM PLANNING



**MINNESOTA
DEPARTMENT
OF HIGHWAYS**

DEPARTMENT HIGHWAY - Statewide Planning -
Room 807

Office Memorandum

TO : Paul G. Velz
Road Design Engineer

DATE: December 17, 1970

FROM : Morris Gildemeister, Chief
Statewide Planning Section

SUBJECT: T.H. 51, T.H. 94 to Pierce-Butler Route
S.P. 6215
System Planning & Analysis Report S-33

The Statewide Planning Section transmits this report in response to C. A. Siggerud's June 8, 1970 request for the 1990 ADT, DHV, and HCADT for the project location shown on the map on page 2.

The estimated 1990 ADT volumes are shown on the map on page 3.

For each segment numbered on the map on page 3, the following data are tabulated on pages 4-6:

- (a) Total ADT
- (b) Vehicle Type Distribution
- (c) Total HCADT

Segment 9, with a 1990 one-way ADT of 18600, has the highest ADT on the project section of T.H. 51. This segment has a 1969 one-way ADT of 17760 vehicles.

The reason the 1969 ADT and 1990 ADT are almost the same is because in the System 14 network, some of the Snelling Avenue (T.H. 51) traffic is assumed to be diverted to other parallel roads which are not built yet.

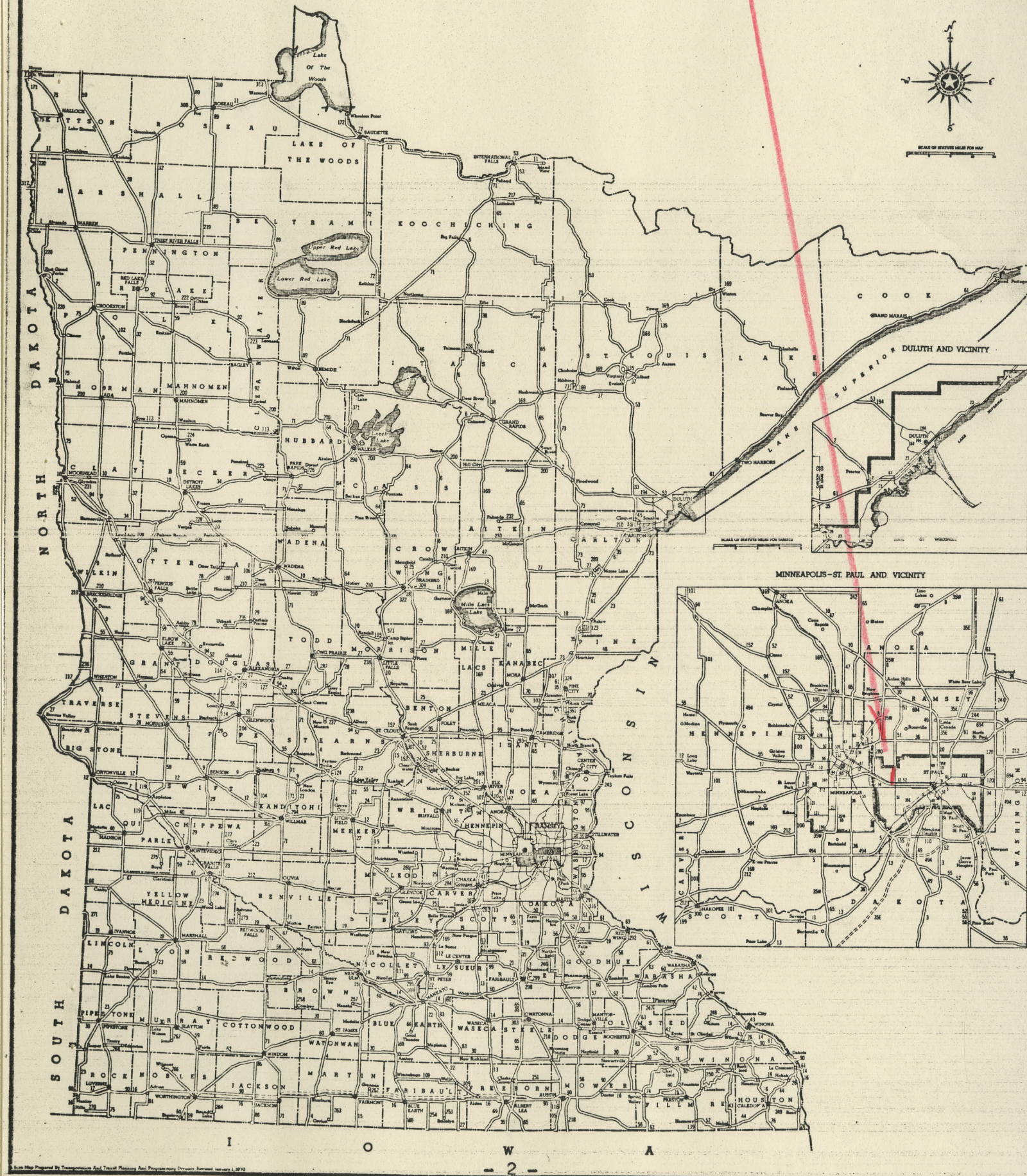
The basic data, method, and assumptions used to prepare this report are presented on page 7.

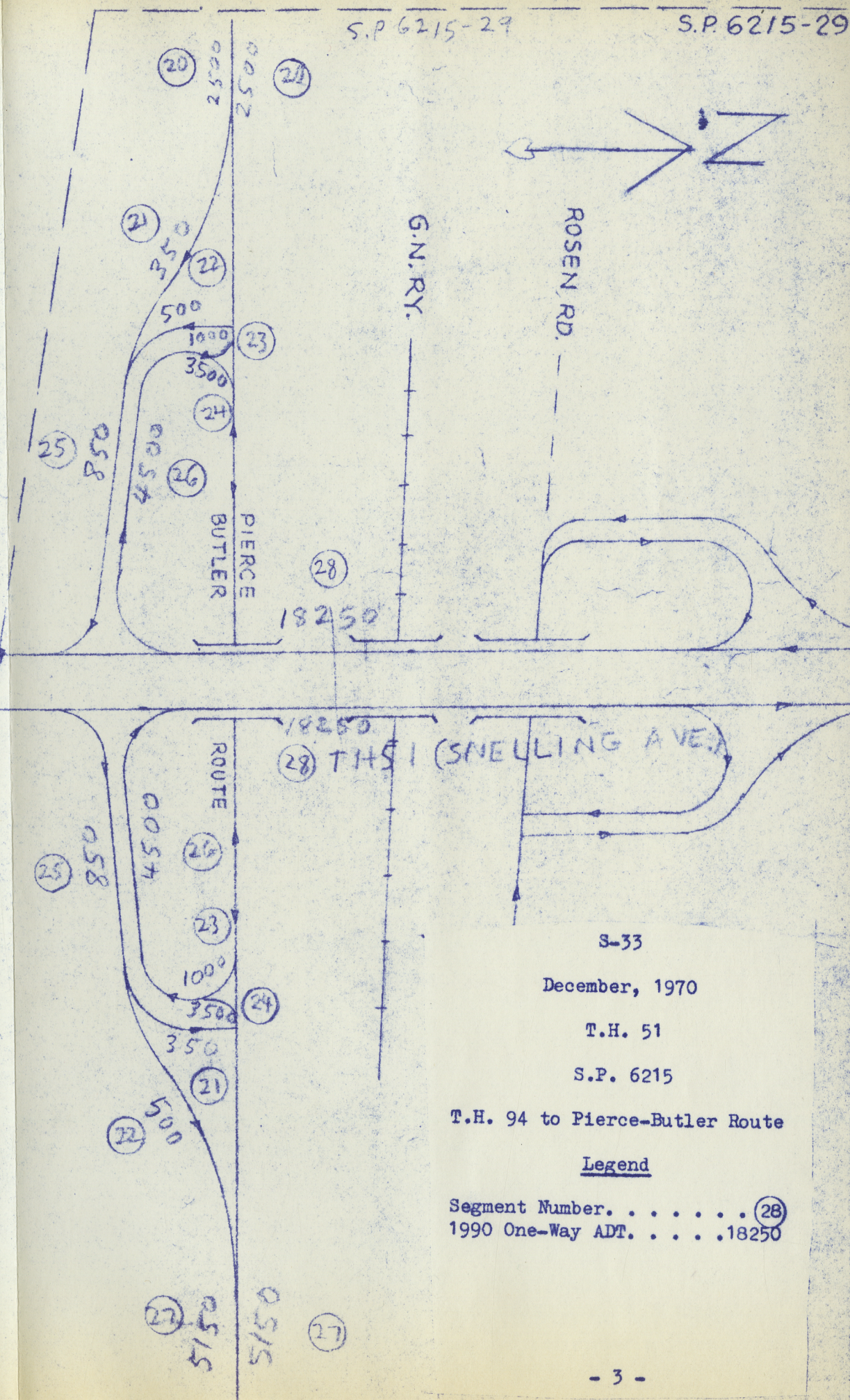
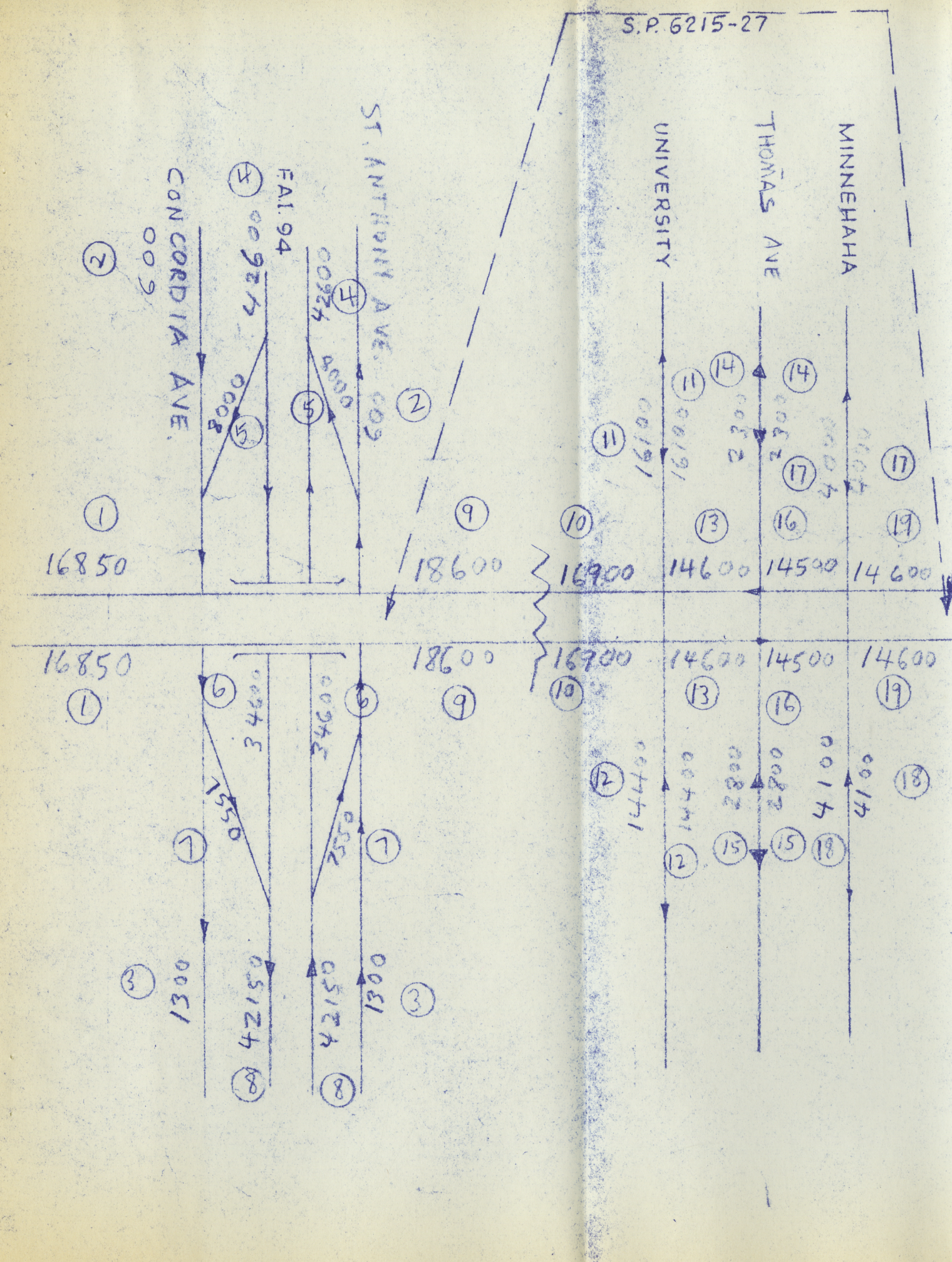
Morris Gildemeister
Morris Gildemeister, Chief
Statewide Planning Section

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STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP

Project Location
S.P. 6215





S-33
 December, 1970
 T.H. 51
 S.P. 6215
 T.H. 94 to Pierce-Butler Route

Legend

Segment Number. (28)
 1990 One-Way ADT. 18250

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 1 OF 3

FOR

T.H. 51 S.P. 6215 LENGTH ----- MILESCOUNTY Ramsey LOCATION T.H. 94 to Pierce-Butler Route

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	15884	583	1263	38540	7578	30962	7101	38063	17535	15913	14749
1	422	10	22	1404	198	1206	204	1410	464	422	575
2	66	2	3	488	30	458	35	493	72	65	170
3	34	-	-	137	13	124	16	140	41	39	74
4	53	-	1	210	23	187	24	211	59	56	93
5	236	3	6	1403	107	1296	114	1410	260	252	227
6	155	2	5	418	51	367	56	423	169	153	212
TOTAL ADT	16850	600	1300	42600	8000	34600	7550	42150	18600	16900	16100
TOTAL H. COMM. ADT	966	17	37	4060	422	3638	449	4087	1065	987	1351
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

- 0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 2 OF 3

FOR

T.H. 51 S.P. 6215 LENGTH ----- MILESCOUNTY Ramsey LOCATION T.H. 94 to Pierce-Butler Route

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE # TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	13181	13795	2153	2607	13735	3754	3880	13795	2345	332	476
1	515	340	71	89	330	122	117	341	65	9	12
2	162	51	15	22	44	26	26	46	24	3	4
3	66	29	8	11	28	13	6	35	7	-	-
4	83	42	9	12	39	16	15	42	13	1	1
5	173	190	20	24	174	28	20	184	33	3	5
6	220	153	24	35	150	41	36	157	13	2	2
TOTAL ADT	14400	14600	2300	2800	14500	4000	4100	14600	2500	350	500
TOTAL H. COMM. ADT	1219	805	147	193	765	246	220	805	155	18	24
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

- 0 = PASSENGER CARS AND 4 TIRE TRUCKS
 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
 6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1990 PART 3 OF 3

FOR

T.H. 51 S.P. 6215 LENGTH ----- MILESCOUNTY Ramsey LOCATION T.H. 94 to Pierce-Butler Route

BASED ON

1990 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 28 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	23	24	25	26	27	28					
0	935	3273	808	4208	4827	17195					
1	26	93	21	119	135	439					
2	10	36	7	46	51	85					
3	3	12	-	15	16	50					
4	6	17	2	23	24	63					
5	15	51	8	66	71	242					
6	5	18	4	23	26	176					
TOTAL ADT	1000	3500	850	4500	5150	18250					
TOTAL H. COMM. ADT	65	227	42	292	323	1055					
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

- 0 = PASSENGER CARS AND 4 TIRE TRUCKS
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 2 = SINGLE UNIT-3 AXLE TRUCKS
 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
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Basic Data, Method, and Assumptions

The 1990 ADT and DHV are presented in SPAR M-25 transmitted July 2, 1970.

Total heavy commercial ADT presented in this report agrees with the System "14" network.

Vehicle classification counts recorded in the study area were adjusted to 1990 volumes using statewide vehicle type trend study.

This report assumes the North Route will not be built.